

## **PIP-II Collaboration Meeting: November 9-10, 2015 at Fermilab**

The 2015 PIP-II Collaboration Meeting will be held November 9-10, 2015 at Fermilab. This will be the first meeting since HEPAP/P5 recommended proceeding with proposal we put forward in the fall of 2013. The descope represented in the PIP-II proposal will have a significant impact on the roles of the various collaborating on PIP-II. We would like to use this meeting to facilitate the realignment of collaborator roles, in particular during the R&D phase of PIP-II.

### **Meeting Goals**

- 1) Review of status of the R&D program
  - a) PXIE
  - b) SRF
- 2) Advance planning on the role of collaborators in the R&D program:
  - a) PXIE
  - b) SRF
  - c) LLRF/resonance control
  - d) RF sources
  - e) Instrumentation
  - f) Controls
  - g) Cryogenic systems
  - h) Booster beam dynamics
  - i) Recycler/Main Injector RF

### **Background Information**

The PIP-II Reference Design was issued in May 2015 and is available at:

<http://pip2-docdb.fnal.gov/cgi-bin/ShowDocument?docid=1>

This document provides the context for the R&D program.

The Department of Energy conducted an Independent Project Review of PIP-II in June. At that review we presented the PIP-II technical concept along with a proposed cost range and funding profile. Based on that review the Department of Energy is now preparing a Mission Need Statement for PIP-II. The MNS provides the basis for proceeding with CD-0.

The collaboration with India on high intensity proton accelerators continues under the terms of the Fermilab-IIFC MOU and the Implementing Agreement between the U.S. Department of Energy and the Indian Department of Atomic Energy. Annex I to the implementing agreement, enabling Indian participation in the construction phase of PIP-II was signed in January, 2015.

### **Meeting Organization**

- Opening plenary session devoted to PIP-II status, strategies, and plans

- Meeting of the primary collaborative working groups, followed by reports on plans and/or possibilities for the R&D period
  - Note: This will be greatly facilitated if working groups are communicating in advance of the meeting
- Working groups
  - PXIE
  - Superconducting Linac
  - Rings

The meeting will end by noon on November 10 to allow people to catch afternoon/evening planes home.

### **Working Group Conveners**

Conveners are responsible for organizing their sessions. Each group should:

- Review, and modify as necessary, goals and deliverables for the R&D phase
- Develop a work plan that defines the sharing of responsibilities among the collaborators for the R&D phase

Conveners are assigned as follows, with the associated suggested scope:

#### **WG1: PXIE/P. Derwent, A. Shemyakin**

Warm components

Integration of HWR and SSR1

Experimental program

#### **WG2: Superconducting Linac/S. Mishra, V. Yakovlev, F. Garcia**

SSR1, SSR2

LB650, HB650

Test Stands: HTS-2, STC

LLRF/resonance control

RF sources

Instrumentation

Controls

Cryogenic systems

Beam dynamics and modelling

#### **WG3: Rings/V. Lebedev, I. Kourbanis**

Beam dynamics and modelling

Booster injection

RF systems

Collimation systems

Dampers

Transition crossing